



2024 CDISC + TMF  
EUROPE INTERCHANGE

BERLIN

24-25 APRIL: CONFERENCE & EXPO | 22, 23, 26 APRIL: TRAININGS

## Content Classification and Review

Gary Shorter, Head of AI, IQVIA Technologies



# Meet the Speaker

Gary Shorter

**Title:** Head of AI

**Organization:** IQVIA Technologies

In IQVIA Tech Gary pursues the use of emerging technology to provide new and more efficient capabilities within the running of Clinical Trials.

This includes development of new design software through to more recent advancements with AIML capabilities where his team have developed several micro-products and micro-services that can be plugged in and used by any SaaS solution.



# Disclaimer and Disclosures

- *The views and opinions expressed in this presentation are those of the author(s) and do not necessarily reflect the official policy or position of CDISC.*
- *The author is responsible for the development of the automation of content classification and review at IQVIA.*



# Agenda

1. Data Flow
2. Intelligent Content Classification and Review
3. Journey
4. Technology
5. Benefits
6. Re-usable AI

# Data Flow

## Acquire

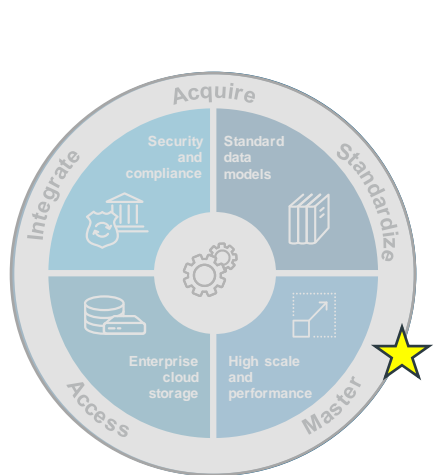
## Store & Connect

## Analyze & Augment

## Intelligent Action

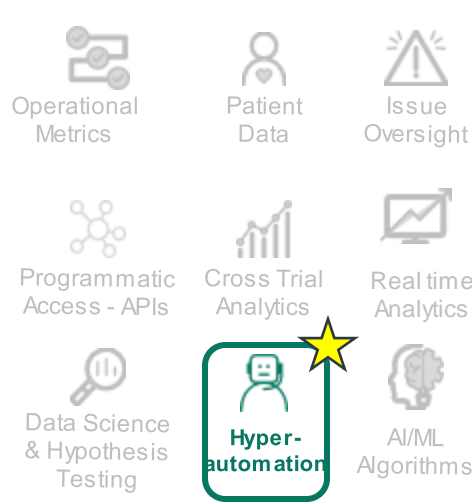


Clinical Data Ingestion



Clinical Data Mapper

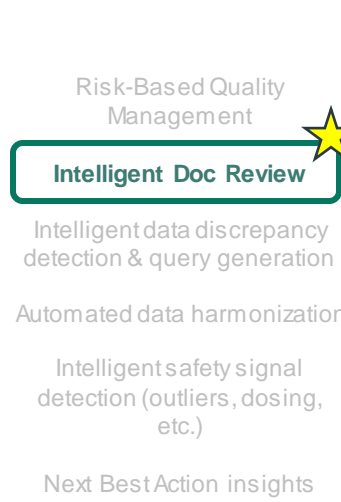
Clinical Data Repository



Clinical Data Review

Clinical Analytics

Data Science Workbench



Intelligent Applications

# Intelligent Content Classification and Review

 **>6,000**  
Employees managed  
by IQVIA

 **>1,000**  
Clinical trials  
run by IQVIA



# Journey



**99%**

Accuracy on top content classification and meta-data

**6 years**

**2018-2020**  
Build and Launch Intelligent eTMF

**2022**  
Refine to Asia and Globalize

**2024**  
Integrate with Customer eTMF

Developed using 12M+ operational records



**2021**  
Scale to 6000+ users and 2.5M documents

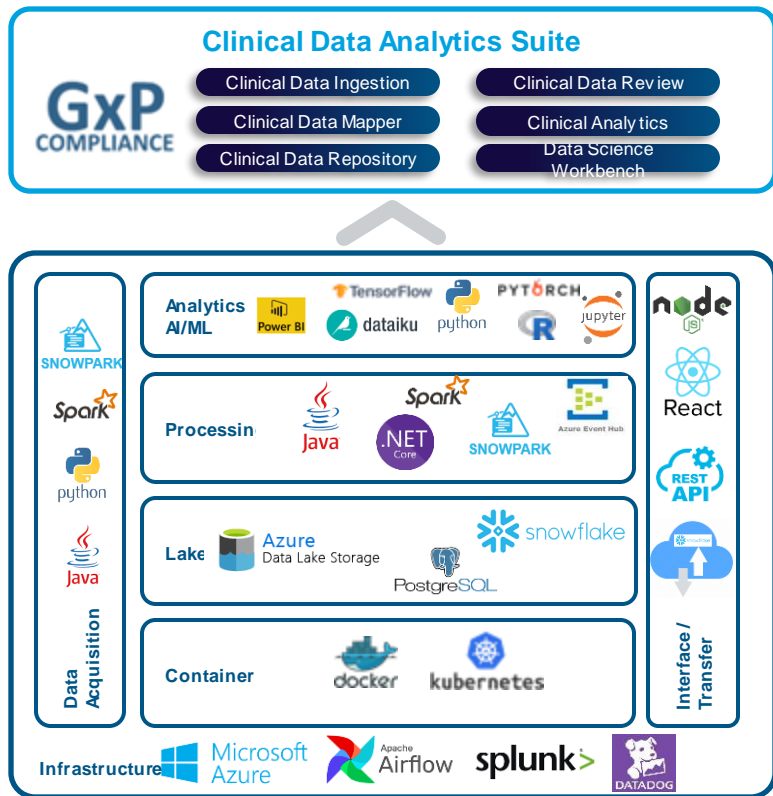
**2023**  
Move to Cloud and offer as stand-alone SaaS

**2024+**  
Site, Regulatory, Content Management expansions

**75%**

Reduction in data entry with bulk loads

# Technology



Capability/Module	Technology
Cloud Provider	Azure (can also support other cloud providers as needed, e.g. AWS)
Orchestration	Airflow/Kubernetes
Storage (Clinical Data Repository)	Snowflake Physical: Azure ADLS
Compute	Snowflake
Logging	Azure ADLS → Splunk
Metadata/Configuration	Postgres on Azure
Messaging	Azure Event Hub
CDAS Admin and Security module	React JS and Java
Clinical Data Ingestion module	React JS and Java
Clinical Data Mapper module	React JS and .NET
Clinical Data Review module	Postgres on Azure
Clinical Analytics module	REACT JS and Java frontend w rapper, Power BI analytics engine
Data Science Workbench/ High Performance Compute	Snowflake, Dataiku (R, Python)



# Benefits

## Innovative Classification Technology

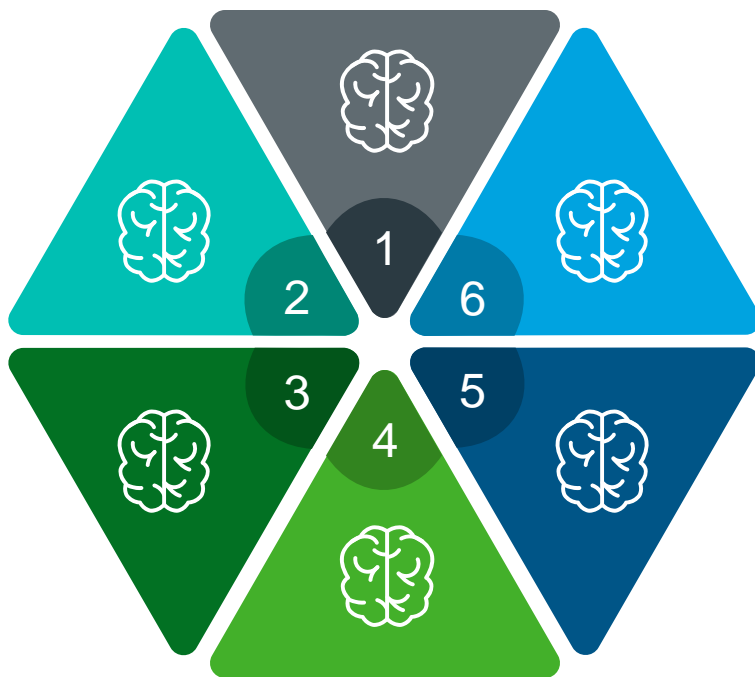
Utilizes digital twins for superior classification, enhancing document sorting and retrieval accuracy

## Extensive Document Handling

Supports over 1,500 document types and 3000+ custom catering diverse studies.

## Multilingual Capabilities

Ingests and scans documents in any language, offering unparalleled global applicability.



## Advanced Automation

Automates **quality** review and metadata extraction, significantly reducing manual effort and error potential.

## User Friendly Interface

Enables drag and drop of documents without pre-work, **streamlining** the document management process.

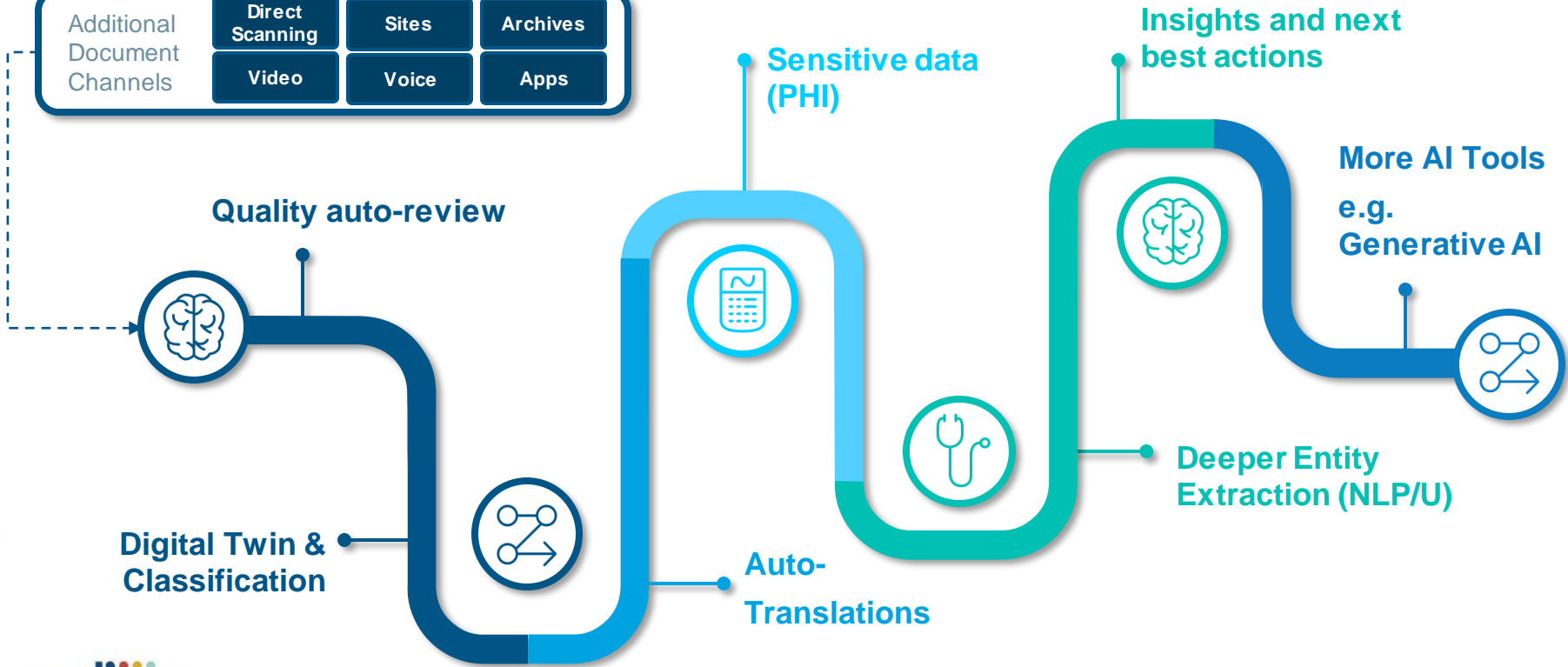
## Proven ML Expertise

Boasts 6 years of ML training across 12M+ clinical documents, demonstrating a deep learning curve and continuous improvement.

# Re-usable AI

- eTMF Platform
- Content Platform
- Reg Platform
- Customer eISF

Additional Document Channels	Direct Scanning	Sites	Archives
	Video	Voice	Apps





# Thank You!

Please contact me with any questions @  
[gary.shorter@iqvia.com](mailto:gary.shorter@iqvia.com) or stop by booth # 13

The logo for CDISC, featuring the lowercase letters "cdisc" in a dark blue font. Above the letter "i" are three small colored dots: a red one on the left, a yellow one in the middle, and a light blue one on the right.